

Amendments to the Specification:

Please amend the brief paragraphs (sections) beginning on page 3 at line 19, page 3 at line 29, page 4 at line 11, page 4 at line 19, and page 4 at line 23 as shown below:

Examples

~~The invention is explained below by way of an example.~~

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 shows a gasification boiler in front view in section,

Figure 2 shows the side view of the entire heating installation in section, and

Figure 3 shows a plan view of the entire heating installation, and

Figure 4 shows the ash separator of an embodiment of the present invention in side view in section.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

A fuel and gasification space 1 and, below it, a horizontal, cylindrical combustion space 3 are arranged in a housing. A filling door 13 for the bales of straw 11 and two doors 12 for the removal of ash are fixed on the front side. At the lower apex of the fuel and gasification space 1, there is a longitudinal slot in the bottom extending over the entire depth. A grating 2 is embedded in said longitudinal slot. Situated below the grating 2 are gas nozzles which lead into a combustion space [[6]] 3. The latter comprises pipe sections of refractory concrete which are guided in a steel pipe.

The combustion chamber 5, ash separator 6 and heat exchanger which are arranged downstream are brought together by means of a framework 10 to form a further

constructional unit. Combustion chamber 5 is connected at the bottom tangentially to the outlet 14 of the combustion space 3, so that the combustion gas rises therein in a swirling manner. Ash separator 6 is connected at the top tangentially to the outlet 17 of the combustion chamber 5. Combustion chamber 5 and ash separator 6 have a cylindrical housing standing perpendicularly. The walls of the housings are insulated and the latter are closed at the top by a shell-shaped cover.

In the ash separator, a pipe 15 is fitted centrally in the upper region and below it a circular baffle plate 8 is fitted in such a manner that an annular opening for the depositing of ash remains from the outer wall.

The adjoining heat exchangers are arranged in a vertical flue gas vent 19. A circulating air fan causes the combustion gases to have a rotational movement in the fuel and gasification space 1. The loose, heavy particles of the combustion matter accumulate in the outer, lateral depressions 4 where they completely combust. Lightweight airborne particles are carried along by the combustion gas flow and at the latest are completely combusted in the combustion chamber 5. Repeated separation of the ash takes place in the ash separator 6. When gas is admitted, the ash particles are pressed against the inner wall and, when deflected by the baffle plate 8, drop downward. The removal of ash takes place through the upper covers 7, 9 and a door in the bottom region 16 of the ash separator 6. The gas flow cleaned in this manner is conducted across the heat exchangers.